



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/739,141	12/19/2003	Takaki Tsutsui	02410248AA	1443

30743 7590 10/27/2004

WHITHAM, CURTIS & CHRISTOFFERSON, P.C.
11491 SUNSET HILLS ROAD
SUITE 340
RESTON, VA 20190

EXAMINER

MAYO III, WILLIAM H

ART UNIT	PAPER NUMBER
----------	--------------

2831

DATE MAILED: 10/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/739,141

Applicant(s)

TSUTSUI ET AL.

Examiner

William H. Mayo III

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/9/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies has been filed in present Application No. 10/739,141, filed on December 19, 2003.

Information Disclosure Statement

2. The information disclosure statement filed December 19, 2003 has been submitted for consideration by the Office. It has been placed in the application file and the information referred to therein has been considered.

Drawings

3. The drawings objected to because Figure 2 lacks the proper cross-hatching which indicates the type of materials, which may be in an invention. Specifically, the cross hatching to indicate the insulation materials is improper. The applicant should refer to MPEP Section 608.02 for the proper cross-hatching of materials. Correction is required.

4. Figures 5-6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The abstract of the disclosure is objected to because it contains two paragraphs, which is improper language for the abstract. The applicant should rewrite the abstract to contain a single paragraph. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2831

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2, 5-8, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Manly (Pat Num 4,371,742). Manly discloses an EMI suppressing cable (Figs 1-3) having excellent EMI absorption characteristics (Col 2, lines 1-6). Specifically, with respect to claim 1, Manly discloses a cable (Fig 2) comprising a core wire bundle (left and right 32), including a plurality of core wires (left and right 32) covered with an insulative covering layer (34), a ferrite compound mixed resin layer (38, i.e. iron powder mixed with polyurethane binder, Col 5, lines 45-50) covering the core wire bundle (left and right 32), and a sheath layer (40) covering the ferrite compound mixed resin layer (38). With respect to claim 2, Manly discloses that a shielding layer (36) is interposed between the core wire (left and right 32) and the ferrite compound mixed resin layer (38, Col 6, lines 66-68). With respect to claim 5, Manly discloses that the ferrite compound mixed resin layer material (38) is a ferrite compound mixed resin tape in which the ferrite powders are evenly compound within the resin (Col 5, lines 45-67) and wherein the ferrite compound mixed resin tape (38) covers the shielding layer (36). With respect to claim 6, Manly discloses that the resin tape (38) is spirally wound (i.e. helically wounded) around on the shielding layer (36) around an axis direction of the core wire bundle (12 & 14, Col 6, lines 66-68). With respect to claim 7, Manly discloses that the resin tape layer (38), is wound on the shielding layer (36) in a direction perpendicular to an axis direction of the insulated signal wire (12 & 14, Col 7, lines 21-25). With respect to claim 8, Manly discloses a method of producing an EMI suppressing cable (Fig 2) comprising the steps of providing a core wire bundle (left and

right 32) which includes a plurality of core wires (left and right 32) covered with insulation covering layer (34), covering the core wire bundle (left and right 32 & 34) with a shielding layer (36), covering the shielding layer (36) with a ferrite compound mixed resin layer (38) and covering the ferrite compound mixed resin layer (38) with a sheath layer (40). With respect to claim 11, Manly discloses a method wherein the ferrite compound mixed resin layer material (38) is a ferrite compound mixed resin tape and the method further comprises of covering the shielding layer (36) with a ferrite compound mixed resin tape (38) formed by adjusting a mixing ratio of ferrite powders are evenly compound within the resin (Col 5, lines 45-67). With respect to claim 12, Manly discloses a method wherein the resin tape (38) is spirally wound (i.e. helically wound) around on the shielding layer (36) around an axis direction of the core wire bundle (12 & 14, Col 6, lines 66-68). With respect to claim 13, Manly discloses a method wherein the resin tape layer (38), is wound on the shielding layer (36) in a direction perpendicular to an axis direction of the insulated signal wire (12 & 14, Col 7, lines 21-25).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 3-4 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manly (Pat Num 4,371,742) in view of Aldissi (Pat Num 5,170,010). Manly discloses an EMI suppressing cable (Figs 1-3) having excellent EMI absorption characteristics (Col 2, lines 1-6) as disclosed above with reference to claims 1 & 8.

However, Manly doesn't specifically disclose the ferrite compound mixed resin layers are formed by an extrusion formation (claims 3 & 9), nor the shielding layer being selected from the group of a metallic braid, metal tape layer, or a metal foil layer (claims 4 & 10).

Aldissi teaches an EMI suppressing cable (Fig 1-4b) that has enhanced and expanded frequencies (Col 2, lines 18-20). With respect to claims 3 & 9, Aldissi discloses a cable (11) and a method of making a cable (Fig 3) comprising a core wire bundle (12-15) including a plurality of core wires (12) respectively covered with insulative covering layers (13), and a ferrite compound mixed resin layers (14) respectively covering the insulating covering layers (13), a shielding layer (16) covering

Art Unit: 2831

the core wire bundle (12-15), and a sheath layer (17) covering the shielding layer (16), wherein the ferrite compound mixed covering layer (14) are formed by an extrusion process (Col 3, lines 29-36). With respect to claims 9-10, Aldissi discloses that the shielding layer (16) is made of metal braided wire layer (Col 4, lines 1-5).

With respect to claims 3 & 9, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the ferrite compound mixed resin layer of Manly to be made by the extrusion process as taught by Aldissi because Aldissi teaches that such a resin layer produced by the extrusion process provides a cable having enhanced and expanded frequencies (Col 2, lines 18-20) and since it has been held that the presence of process limitations in product claims, in which the product doesn't otherwise patentably distinguish over the prior art, cannot impart patentability to that product.

With respect to claims 3 & 9, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the shielding layer of Manly to be made of a metallic braid as taught by Aldissi because Aldissi teaches that such a shielding configuration provides a cable having enhanced and expanded frequencies (Col 2, lines 18-20) and it is well known in the art of cables that braided shields are commonly utilized for providing the cable with more flexibility and since the applicant has not disclosed that such a modification solves any stated problems or is for any particular purpose and it appears that Manly would perform equally well with or without the modification.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Senda et al (Pat Num 5,990,417), Ono et al (Pat Num 6,534,708), Lai (Pat Num 5,237,635), Aldissi (Pat Num 5,132,4901), Olyphant, Jr (Pat Num 4,533,784), Baigrie et al (Pat Num 4,816,614), Prysner (Pat Num 6,225,565), Ikeda et al (JP Pat Num 11-185542 A), Vacuumschmelze (DE Pat Num 3123040 A), Tsuna et al (JP Pat Num 04-215213 A), Suda (JP Pat Num 06-181012), Kaneko et al (JP Pat Num 06-203652 A), Cornelius (Pat Num 4,486,721), Grandy (Pat Num 6,492,588), Sakamoto et al (JP Pat Num 09-306245 A), Gagnon (Pat Num 6,441,308), King (Pat Num 6,215,070), and Hillburn (Pat Num 5,521,331), all of which discloses cables having ferrite resin mixed layers.

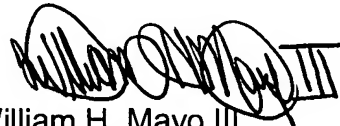
Communication

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2831

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'William H. Mayo III', written over a circular stamp.

William H. Mayo III
Primary Examiner
Art Unit 2831

WHM III
September 25, 2004